

Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 1-35 are pending in the application, with claims 1, 18, 30, and 35 being the independent claims. Claims 1, 7, 10, 13, 14, 30, and 33-35 are sought to be amended. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Telephonic Interview

Applicants and Applicants' representative wish to thank Examiner Donald Mills for the telephonic interview (hereinafter "the Interview") with the Applicants' representative, Mr. Timothy Doyle, on March 31, 2009. During the interview, Applicants' representative and the Examiner discussed the differences between U.S. Patent No. 7,305,047 to Turner (hereinafter "Turner") and the embodiments of the present invention delineated by the claims. The substance of the interview is incorporated in the following remarks.

Specification

Applicants have amended paragraph [0002] of the specification of the present patent application to comply with Section 201.11 of the Manual of Patent Examining Procedure.

Objections to the Drawings

The Examiner, at page 2 of the Office Action, objected to the drawings because formal drawings are required. Please substitute the attached thirteen (13) replacement sheets of formal drawings (including Figures 1-6, 7A, 7B, 8, 9, 10A, 10B, and 11), at the attached Appendix following page 17 of this paper, for the corresponding thirteen (13) sheets of

drawings originally filed. No new matter has been entered. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the objections to the drawings.

Rejections Under 35 U.S.C. § 101

The Examiner, at page 3 of the Office Action, rejected claims 1-22 and 28-30 under 35 U.S.C. § 101. Because Applicants have amended these claims in the manner discussed during the Interview, Applicants respectfully submit pending claims 1-22 and 28-30 overcome the rejections under 35 U.S.C. § 101. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejections of claims 1-22 and 28-30 under U.S.C. § 101.

Rejections Under 35 U.S.C. § 102

The Examiner, at page 4 of the Office Action, rejected claims 1-35 under 35 U.S.C. § 102(e) as allegedly being anticipated by Turner. Applicants respectfully traverse these rejections.

Claims 1-29

Independent claim 1 recites, *inter alia*, "transmitting a first ordered set from the first hardware node[.]" (Emphasis added.) Independent claim 18 recites, *inter alia*, "a first logic circuit coupled between said Physical Coding Sublayer service interface and said Physical Medium Attachment service interface and configured to identify a first ordered set received from a Reconciliation Sublayer[.]" (Emphasis added.) Turner does not disclose, teach, or suggest at least these features.

Code groups and ordered sets are explained, for example, at paragraphs [0032] and [0033] and at figures 5 and 6 of the specification of the present patent application:

In IEEE Std 802.3ae, code groups are differentiated as either data code groups or special code groups. In each lane, if the control bit from the XGMII character is a zero, then the resulting code group is a data code group. 10GBASE-X 218 allows for 256 different data code groups. In each lane, if the control bit from the XGMII character is a one, then the resulting code group is a special code group. Clause 48 defines valid special code groups. FIG. 5 presents tables of IEEE Std 802.3ae valid code groups. Data code groups are annotated "Dx.y", where "x" is the decimal value of XGMII bits EDCBA (see FIG. 4), and "y" is the decimal value of XGMII bits HGF (see FIG. 4). Special code groups are similarly annotated "Kx.y". Code groups with bit combinations not specified in FIG. 5 are invalid.

IEEE Std 802.3ae also uses ordered sets of code groups. Each ordered set: (1) consists of combinations of special and data code groups, (2) is four code groups in length, and (3) begins in lane 0. Special code groups and ordered sets provide capabilities for error indication, packet delineation, column fill, synchronization, deskew, clock rate compensation, and link status reporting. An ordered set can be annotated as a sequential listing of its code groups with slash symbols ("/") used to differentiate lanes. For example, the sequence /Ka.b/Dc.d/De.f/Dg.h/ indicates that code group Ka.b is assigned to lane 0, code group Dc.d is assigned to lane 1, etc. An ordered set can also be annotated by a letter with a double bar symbol ("||") before and after the designator (e.g., ||Z||). FIG. 6 presents a table of predefined IEEE Std 802.3ae ordered sets and special code groups. In this table, use of data code group "Dx.y" at a position in a sequence indicates that any data code group can be used in that lane. The ordered sets of FIG. 6 are organized in groups, which are named for the functions they support: Idle, Encapsulation, and Link Status.

None of the embodiments disclosed in Turner uses an ordered set, which as discussed above includes a predetermined code group for each lane. In each of the embodiments illustrated at figures 12, 13, 18, and 19 of Turner the content of at least one lane is not a predetermined code group. Therefore, none of the embodiments disclosed in Turner uses an ordered set. For example, in figure 12 of Turner, the Sequence special code group is used in lane 0 and either a 0x01 or 0x02 code group is used in lane 3, but the contents of lanes 1 and 2 are not predetermined code groups; in figure 13 of Turner, the Start special code group is used in lane 0 and the Start of Frame Octet code group is used in lane 3, but the contents of lanes 1 and 2 are not predetermined code groups; in figure 18 of Turner, the Terminate special code group is used in lane 1, but the contents of lanes 0, 2, and 3 are not

predetermined code groups; and in figure 14 of Turner, the Terminate special code group is used in lane 2 and the Idle special code group is used in lane 1, but the contents of lanes 0 and 3 are not predetermined code groups.

Therefore, each of claims 1 and 18 is not anticipated by Turner. Furthermore, because each of claims 2-17 and 19-29 depends from claims 1 or 18 and because of the individual distinctive features of each of claims 2-17 and 19-29, each of these claims is also not anticipated by Turner. Accordingly, Applicants respectfully request that the Examiner reconsider claims 1-29, withdraw the rejections of these claims under 35 U.S.C. § 102(e), and pass these claims to allowance.

Claims 30-34

Independent claim 30 recites, *inter alia*, "wherein each code group of the first set of code groups is different from special code groups predefined by the protocol[.]" (Emphasis added.) Turner does not disclose, teach, or suggest at least this feature. None of the embodiments disclosed in Turner uses code groups different from special code groups predefined by the IEEE Std 802.3ae specification. Each of the embodiments illustrated at figures 12, 13, 18, and 19 of Turner uses a special code group predefined by the IEEE Std 802.3ae specification. For example, in figure 12 of Turner, the Sequence special code group is used in lane 0; in figure 13 of Turner, the Start special code group is used in lane 0; in figure 18 of Turner, the Terminate special code group is used in lane 1; and in figure 14 of Turner, the Terminate special code group is used in lane 2.

Therefore, claim 30 is not anticipated by Turner. Furthermore, because each of claims 31-34 depends from claim 30 and because of the individual distinctive features of each of claims 31-34, each of these claims is also not anticipated by Turner. Accordingly,

Applicants respectfully request that the Examiner reconsider claims 30-34, withdraw the rejections of these claims under 35 U.S.C. § 102(e), and pass these claims to allowance.

Claim 35

Independent claim 35 recites, *inter alia*, "the second ordered set is one of /K28.4/D0.0/D0.0/D1.0/, /D1.0/K28.4/D1.0/D0.0/, /D0.0/D1.0/K28.4/D0.0/, /D0.0/D0.0/D1.0/K28.4/, /D1.0/D0.0/D0.0/K28.4/, /K28.4/D1.0/D0.0/D0.0/, /D0.0/K28.4/D1.0/D0.0/, /D0.0/D0.0/K28.4/D1.0/, /K28.4/D0.0/D0.0/D2.0/, /D2.0/K28.4/D0.0/D0.0/, /D0.0/D2.0/K28.4/D0.0/, /D0.0/D0.0/D2.0/K28.4/, /D2.0/D0.0/D0.0/K28.4/, /K28.4/D2.0/D0.0/D0.0/, /D0.0/K28.4/D2.0/D0.0/, and /D0.0/D0.0/K28.4/D2.0/." Turner does not disclose, teach, or suggest at least this feature. Therefore, claim 35 is not anticipated by Turner. Accordingly, Applicants respectfully request that the Examiner reconsider claim 35, withdraw the rejections of this claim under 35 U.S.C. § 102(e), and pass this claim to allowance.

Moreover, as requested by the Examiner during the Interview, Applicants remind the Examiner that he conceded that at least this feature is also not disclosed, taught, or suggested by InfiniBand™ Architectural Release 1.0.

Conclusion

All of the stated grounds of objection and rejection have been properly traversed or accommodated. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Amendment dated July 17, 2009
Reply to Office Action of March 17, 2009

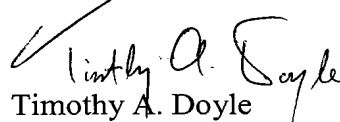
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Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

A handwritten signature in black ink, appearing to read "Timothy A. Doyle". The signature is written in a cursive, flowing style with a large initial "T".

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